--The method according to the present invention of the generic type achieves the aforesaid object by confocal scanning microscope which comprises: at least one light source defining an illuminating beam path, at least one detector defining detection beam path, a plurality of components arranged in the illuminating beam path and the detection beam path wherein the optical properties of the components arranged in the beam path are coordinated with one another and the accumulated aberrations, with respect to the optical axis 33 and/or at least one surface in the specimen region, are at least of the order of magnitude of the theoretically achievable resolution capability.--

Please delete the paragraph and title beginning at page 10, lines 22-27 through page 11, lines 1-5 and insert it starting at page 3, line 25:

--BRIEF DESCRIPTION OF THE DRAWINGS

There are various ways of advantageously embodying and developing the teaching of the present invention. In conjunction with the explanation of the preferred exemplary embodiments of the invention with reference to the drawings, an explanation is also given of generally preferred embodiments and developments of the teaching. In the drawings:

FIG. 1 schematically depicts an exemplary embodiment of a double confocal scanning microscope according to the present invention; and

FIG. 2 schematically depicts two chromatically selective components in the detected beam path of a double confocal scanning microscope.

DETAILED DESCRIPTION OF THE INVENTION--

In the claims:

Please cancel claims 5-7, 11-15.

Please add claims 19 and 20.

Please amend claims 1-3, 8-10 and 16-18 as follows:

1.(Amended) A double confocal scanning microscope comprising:

at least one light source defining an illuminating beam path and emitting coherent light of a first, second and third wavelengths;

at least one detector defining detection beam path; and

two microscope objectives disposed along an optical axis and defining a first, second and third planes, a beam splitter, and a lens arranged in the illuminating beam path and the detection beam path,

wherein the two microscope objectives, the beam splitter and the lens cause the light of the first wavelength to be focused by the two microscope objectives on the first plane, the light of the second wavelength to be focused by the two microscope objectives on the second plane, and the light of the third wavelength to be focused by the two microscope objectives on the third plane, therefore reducing longitudinal chromatic aberrations of the two microscope objectives with respect to the optical axis and/or at least one plane out of the first, the second, and the third planes to the order of magnitude of the theoretically achievable resolution capability of the microscope.

2.(Amended) The scanning microscope as defined in Claim 1, wherein the longitudinal chromatic aberrations of the two microscope objectives are reduced with regard to the second plane, the second plane being at least partially coincident with a focal plane of the two microscope objectives.

3.(Amended) The scanning microscope as defined in Claim 1, wherein the second plane is symmetrically disposed between the first and the third planes.

8.(Amended) The scanning microscope as defined in Claim 1, wherein reduction of the chromatic aberrations occurs for the light of the first, second and third wavelengths selected from a wavelength range from about 200 nm to about 2000 nm.

9.(Amended) The scanning microscope as defined in Claim 1, wherein polarization properties of the two microscope objectives disposed along an optical axis, a beam splitter, and a lens are

coordinated with one another in such a way that the light of the first, second and third wavelengths is focused on the first, second and third plane accordingly .

10.(Amended) ~~The scanning microscope as defined in Claim 1, further~~ comprising a detection pinhole and a ~~dichroic beam splitter~~ detecting the illumination beam path, wherein a position of at least the dichroic beam splitter or a position of at least the detection pinhole can be altered.

16.(Amended) The scanning microscope as defined in Claim 10, wherein the detection pinhole is embodied as at least one chromatically selective component.

17.(Amended) The scanning microscope as defined in Claim 16, wherein at least one chromatically selective component is provided for each detected wavelength region.

18.(Amended) The scanning microscope as defined in Claim 16, further comprising a multi-band detector disposed after the chromatically selective component.

19. (New). The scanning microscope of Claim 1, wherein the first wavelength is about 488 nm, the second wavelength is about 567 nm, and the third wavelength is about 647 nm.

20.(New) The scanning microscope of Claim 1, wherein the theoretically achievable resolution capability of the microscope is about 100 nm.